

Appl. No. 09/995,464
Reply to Office Action of January 13, 2005

Docket No. EMC-019AUS

REMARKS

Applicants respectfully request reconsideration of the present application in view of the amendments set forth above and the below remarks.

Claims 1-10 are pending. Claims 1, 4, 5, 7, 9, and 10 are amended herein and Claim 6 is cancelled without prejudice.

Claim 7 was rejected as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants have amended claim 7 to point out that the first interface portion and the remote data service application conform to a common interface, in order to bring claim 7 in line with the amendment to claim 1. By conforming to a common interface it is meant that a common interface (e.g., CDI layer 96 of Figure 5) accommodates both the first interface portion (e.g., socket relay 98 of Figure 5) and the remote data service application (e.g., RDF emulation 94 of Figure 5). As stated on page 9 of the specification, "CDI can be viewed as being embodied in an I/O control block (hereinafter, 'IOCB') data structure. This IOCB data structure is a generic structure that serves to define a common interface between the emulation 94 and a CDI compliant lower layer (CDI driver) with which the emulation 94 communicates in transferring commands and data."

In view of the above, it is submitted that the rejection of claim 7 under 35 U.S.C. §112, second paragraph, should be removed.

Claims 1-2, 9, and 10 are rejected as being anticipated by Yanai et al. (U.S. Patent No. 5,742,792, hereinafter "Yanai"). Applicants have amended independent claims 1, 9 and 10 in order to clarify the connection between the remote data service application and the TCP/IP protocols software layer. The independent claims have also been amended to specify that the interface is split across two processors, with a first interface portion residing on a first processor and a second interface portion residing on a second processor. Claim 6 has been cancelled accordingly.

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It is submitted that Yanai neither describes nor suggests the arrangement of the independent claims comprising using an interface between the remote data service application and a TCP/IP protocols software layer to form a connection to the IP network or enabling transfer of the storage traffic between the data storage system and the remote data storage system over the IP network using the connection to the IP network. In this regard, the Examiner directs Applicant's attention to Yanai col. 9, lines 58-67 and col. 10, lines 1-8 and 14-22. However, in neither cited excerpt does Yanai describe or suggest the claimed arrangement. The column 8 excerpt describes simply that the "second disk adapter 36 is coupled, via a high speed communication link 40 to a disk adapter 42 on a secondary data storage system controller 44 of a secondary data storage system 46." And the column 10 excerpts describe that the "data storage system 10 is designed to operate in a point-in-time or asynchronous mode... [and that] in the real time or synchronous mode, the primary data storage system automatically controls the duplication of copying or data to the secondary data storage system controller transparently to the primary host computer."

Furthermore, Yanai also does not describe or suggest the aspect of amended claim 1 "wherein the interface is split across two processors, with a first interface portion residing on a first processor and a second interface portion residing on a second processor." In paragraph 10 of the January 13, 2005 Office Action, the Examiner states, with reference to claim 6, that "Yanai fails to teach the socket interface is split across two processors, with a first socket relay residing on a first processor and a second socket relay residing on a second processor. Blankenship teaches the socket interface is split across two processors (Fig. 3 element 124, 126)." Applicants respectfully submit that Blankenship et al. (U.S. Patent No. 6,624,388, hereinafter "Blankenship") fails to teach the claimed interface split across two processors. Elements 124 and 126 shown in Figure 3 of Blankenship are welders that "may have one or more network connections to a plurality of remote systems 140." However, there is no teaching of an interface used between a remote data service application and a TCP/IP protocols software layer to form a connection to the IP network, which interface is split across two processors (e.g., the processors of the welders 124 and 126).

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In view of the above, it is submitted that independent claims 1, 9, and 10 are patentable over Yanai alone and in combination with Blankenship. Claim 2 is dependent on claim 1 and thus, includes the limitations of claim 1. Accordingly, it is submitted that claim 2 is patentable at least for the reasons discussed above in conjunction with claim 1.

The claims are also believed to be patentable over a WO 01/35244 reference which was cited by Applicants and considered, but not applied by the Examiner.

Claims 3-8 were rejected as being obvious over Yanai in view of Blankenship. Claims 3-8 are dependent on claim 1 and thus, include the limitations of claim 1. It is submitted that claims 3-8 are patentable at least for the reasons discussed above in conjunction with claim 1.

As the claims and the entire case are believed to be in condition for allowance, an early indication thereof is respectfully requested.

The Examiner is respectfully invited to telephone the undersigning attorney if there are any questions regarding this Amendment or this application.

Applicant does not acquiesce to any assertion made by the Examiner that is not specifically addressed herein.

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The Assistant Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or credit any overpayment to Deposit Account No. 500845.

Respectfully submitted,

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